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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,379	10/15/2001	Stephen C. Ennis	5500-71600	4194

7590 03/12/2004

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Austin, TX 78767

EXAMINER
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KNAPP, JUSTIN R

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 03/12/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/978,379

Applicant(s)

ENNIS, STEPHEN C.

Examiner

Justin Knapp

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.4.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Examiner's Notes*

1. It is noted the following papers have been received: Rescind Letter as received 07/23/02; IDS as received 08/15/02; IDS as received 04/28/03.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 8, 10, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Melvin, et al (herein referred to as Melvin), US Pub No. 2003/0069920.

4. Referring to apparatus claims 1 and 10, Melvin teaches:

a first buffer circuit coupled to receive control commands from a first source, wherein said first buffer circuit includes a first plurality of buffers for storing selected control commands (see [0006] through [0011]);

a second buffer circuit coupled to receive control commands from a second source, wherein said second buffer circuit includes a second plurality of buffers for storing selected control commands (see [0006] through [0011]); and

an arbitration circuit coupled to said first buffer circuit and to said second buffer circuit, said arbitration circuit is configured to arbitrate between said control commands stored in said first

Art Unit: 2182

buffer circuit and said control commands stored in said second buffer circuit (see [0627] through [0635]);

wherein the outcome of selected arbitration cycles is dependent upon a number of times in which a control command from a given one of said buffers is blocked due to an unavailable destination (see [0635]).

5. Referring to claims 8 and 17, Melvin teaches wherein said unavailable destination is a destination buffer (the destination buffers are the memory blocks of the various tribes that are being accessed by the other tribes).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 3, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin in view of Mihara et al (herein referred to as Mihara), USPN 4,998,027.

8. Referring to claims 2, 3, 11, and 12, Melvin does not explicitly teach wherein said arbitration circuit includes first and second arbitration units configured to arbitrate between the selected control commands stored within the first and second plurality of buffers. Mihara has taught arbitration circuitry for arbitrating contention between multiple request signals. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize

Art Unit: 2182

Mihara's arbitration circuitry in the arbitration scheme of Melvin for the purposes of improving the prioritization of request signals.

9. Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melvin.

10. Referring to claims 9 and 18, Melvin does not explicitly teach wherein said arbitration circuit is further configured to determine whether storage space is available within said destination buffer. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine whether storage space is available within the determination buffer. One would have been motivated to do so to prevent problems such as buffer overflow from occurring.

#### ***Allowable Subject Matter***

11. Claims 4-7 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is reminded in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made. Applicant must also show how the amendments avoid such references and objections.

Art Unit: 2182

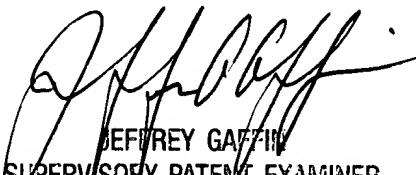
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Knapp whose telephone number is (703) 308-6132. The examiner can normally be reached on Mon - Fri 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Knapp  
Examiner  
Art Unit 2182

March 5, 2004

  
JEFFREY GAFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100